

J.B.G.Frenk

Teaching Activities

July 1, 2015

1. **Econometric Institute, Erasmus University, Rotterdam** (1979 – 1983)
courses on parametric statistics (boek R.V. Hogg and A.T. Craig, Introduction to mathematical statistics, MacMillan, 1970) and Markov processes (level W.Feller, Introduction to Probability Theory and its applications, volume 1, Wiley, 1970) and Probability theory and Martingales (coursenotes level S.Karlin and H.M. Taylor, a first course in stochastic Processes, Academic Press, 1975)
2. **Department of Industrial Engineering and Operations Research, University of California, Berkeley**, (1983 – 1984).
Undergraduate course Introduction to Operations Research techniques (level Hillier and Lieberman, Introduction to Operations Research, McGraw-Hill)
3. **Department of Mathematics, TU Eindhoven**, (1985 – 1986).
Courses (for mathematics students) on Markov and regenerative stochastic processes (level E. Çinlar, Introduction to Stochastic Processes, Prentice Hall, 1975, queueing theory and simple network models (level Kleinrock, Queueing systems, volume 1, Wiley, 1975), game theory. Course (for management science students) introduction to applied stochastic models (level Hillier and Lieberman.)
4. **Econometric Institute, Erasmus university, Rotterdam** (1987 – 2009)
In the past courses for econometrics students on inventory control (E.A. Silver, D.F. Pyke and R. Peterson, Inventory management and production planning and scheduling, Wiley 1998 and course notes), location theory (course notes: level R.L. Francis, J.A. White, Facility layout and location, an analytical approach, Prentice Hall, 1974), convex analysis (course notes: level R.T. Rockafellar, convex analysis, Princeton university Press, 1972), applied stochastic processes (several books of Ross) and applications of deterministic OR techniques (level Hillier and Lieberman), statistics for economists (book P.W. Newbold, Statistics for business and economics).

Presently taught courses:

- **Statistical techniques of Simulation**, first block: september-october (8 weeks, 4 hours

a week), literature S.M. Ross, Simulation (3rd edition), Academic Press and course notes, second year bachelor econometrics.

- **Combinatorial Optimization**, first block: september-october (8 weeks, 6 hours a week), literature L. Wolsey, Integer Programming, Wiley, 1998 and course notes, second year bachelor econometrics.
- **Stochastic Models and Optimization**, first block (8 weeks, 4 hours a week), literature H.C. Tijms, A first course in Stochastic Models, Wiley, New York, 2003 and course notes, master logistics econometrics.
- **Markov processes**, fourth block: march-april (8 weeks, 4 hours a week, literature S.M.Ross, Introduction to Probability Models, edition 8, Academic Press, 2003 and course notes, second year bachelor econometrics.
- part of course **Intelligent decision analysis**, first trimester 3th year bachelor Economics and Informatics, topic: Introduction to linear, integer and dynamic programming and modeling, literature: Hillier and Lieberman, An introduction to Operations Research. McGraw Hill, Edition 7
- part of course **Topics in Operations Research and Logistics**, fourth block march-april (8 hours): topic: Revenue management, literature course notes: models in revenue management and discussion papers from literature by students, masters logistics econometrics.

5. **LNMB course for all Ph.D students Operations Research in Holland, Utrecht University 2007-2008** Course Revenue management (20 hours), literature Talluri, Van Ryzin, The theory and practice of revenue management, Kluwer Academic Publishers, 2004 and course notes

6. **Sabanci university: 2009-present**

- Undergraduate third year core course Deterministic models in Operations Research (MS301). Course material: course notes and part I basic Theory of the book V. Chvatal, Linear programming, Freeman, 1999, ISBN 0-7167-1195-8.
- Graduate core course stochastic processes (IE503). Course material: course notes and first 5 Chapters of the book S.M.Ross, Stochastic Processes (2nd edition), Wiley, New York, 1996, ISBN 0-471-12062-6
- Undergraduate second year core course Probability Theory (MATH 203) (with Semih Sezer). Course material: course notes and first 8 chapters of the book I. Miller and M. Miller, John E. Freund's Mathematical Statistics with Applications (Edition 8) Pearson, Boston, 2014, ISBN 0-321-90440-0
- Undergraduate third year core course Stochastic Processes (MS 302) (two sections with Semih Sezer) Course material: course notes and first 8 chapters of the book S.M.Ross, Introduction to Probability Models Edition 10, ISBN 978-0-12-375686-2

- Graduate Ph.D course Markov Dynamic Programming (with Semih Sezer) IE605 Course material: course notes Markov Decision Processes on metric spaces and parts of the book M.Puterman, Markov Decision Processes, Wiley, 2005, ISBN 0-471-72782-2